

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) An isolated DNA molecule comprising a DNA sequence encoding a BMP receptor protein, wherein the DNA sequence comprises nucleotides 61 to 1656 of SEQ ID NO:1.

2-3. Cancelled.

4. (Currently amended) The An isolated DNA molecule comprising a DNA sequence encoding a BMP receptor protein, wherein the DNA sequence comprises of-  
claim 1, wherein said DNA sequence is selected from the group consisting of:

[[a)] nucleotides encoding for amino acids 24 to 532 of SEQ ID NO: 2[[:]]

and

~~(b) nucleotides encoding for amino acids 8 to 502 of SEQ ID NO: 4; and~~

~~(c) sequences which hybridize to any of (a) or (b) under stringent hybridization conditions and encode a BMP receptor protein with the ability to bind to BMP in a binding assay.~~

5. Cancelled.

6. (Currently amended) An isolated host cell transformed with the DNA molecule of claim 1.

7. Cancelled.

8. (Currently amended) An isolated host cell transformed with the DNA molecule of claim 4.

9. Cancelled.

10. (Currently amended) An isolated DNA molecule having a sequence encoding a truncated BMP ~~BUT~~ receptor protein which is characterized by the ability to bind to BMP-2 or BMP-4 in a binding assay, said DNA molecule comprising a DNA sequence selected from the group consisting of:

- (a) nucleotide 61 to 507 of SEQ ID NO: 1;
- (b) nucleotides encoding amino acids 1 to 149 of SEQ ID NO:2; and
- (c) nucleotides encoding amino acids 24 to 149 of SEQ ID NO:2

~~nucleotide 247 to 618 of SEQ ID NO:3;~~

- ~~(d) nucleotides encoding amino acids 8 to 124 of SEQ ID NO:4; and~~
- ~~(e) naturally occurring allelic sequences and equivalent degenerative codon sequences of (a)[[.]] or (b), (c), or (d).~~

11. (Currently amended) An isolated host cell transformed with the DNA molecule of claim 10.

12. (Original) A vector comprising a DNA molecule of claim 10 in operative association with an expression control sequence therefor.

13. (Currently amended) A method for producing a purified truncated BMP ~~BUT~~ receptor protein, said [[.]] method comprising the steps of:

(a) culturing in a culture medium a host cell transformed with a DNA sequence according to claim 10, comprising a nucleotide sequence encoding a truncated BMP receptor protein; and

(b) recovering and purifying said truncated BMP receptor protein from the culture medium.

14-18. Cancelled.

19. (Original) A method for producing a truncated BMP receptor protein, said method comprising the steps of:

(a) culturing in a culture medium a host cell according to claim 11, comprising a truncated nucleotide sequence encoding the ligand binding domain of a BMP receptor protein; and

(b) recovering and purifying said BMP receptor protein from the culture medium.

20-30. Cancelled.

31. (Original) An isolated DNA molecule comprising the DNA sequence of CFK1-23a.

32-52. Cancelled.